

$f_2(1910)$ $I^G(J^{PC}) = 0^+(2^{++})$

OMITTED FROM SUMMARY TABLE

We list here three different peaks with close masses and widths seen in the mass distributions of $\omega\omega$, $\eta\eta'$, and K^+K^- final states. ALDE 91B argues that they are of different nature.

NODE=M142

 $f_2(1910)$ MASS **$f_2(1910)$ $\omega\omega$ MODE**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1903± 9 OUR AVERAGE	Error includes scale factor of 1.5. See the ideogram below.		

1890±10	¹ AMELIN	06	VES	36 $\pi^- p \rightarrow \omega\omega n$
1934±20	ANISOVICH	00J	SPEC	
1897±11	BARBERIS	00F		450 $p p \rightarrow p_f \omega\omega p_s$
1924±14	ALDE	90	GAM2	38 $\pi^- p \rightarrow \omega\omega n$

¹ Supersedes BELADIDZE 92B.

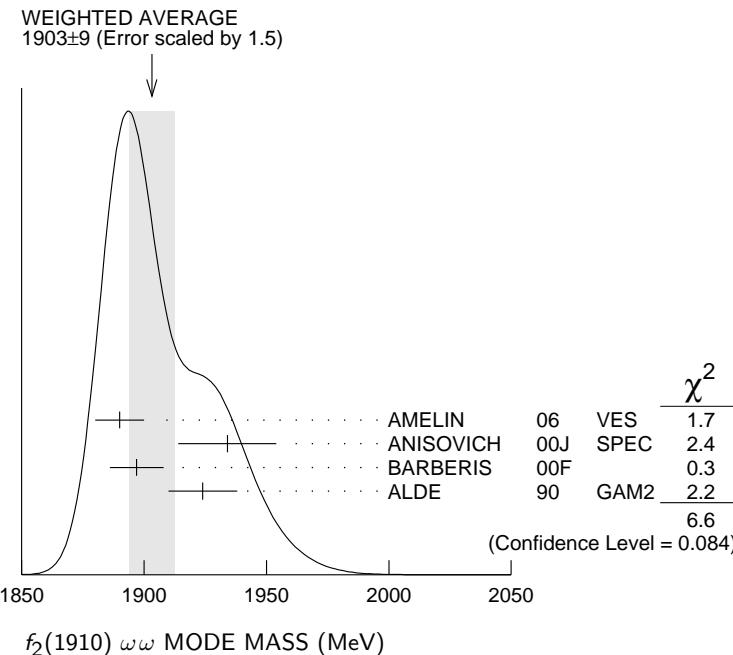
NODE=M142205

NODE=M142MX

NODE=M142M2

NODE=M142M2

NODE=M142M2;LINKAGE=AM

 **$f_2(1910)$ $\eta\eta'$ MODE**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1934±16	² BARBERIS	00A	450 $p p \rightarrow p_f \eta\eta' p_s$

• • • We do not use the following data for averages, fits, limits, etc. • • •

1911±10	ALDE	91B	GAM2	38 $\pi^- p \rightarrow \eta\eta' n$
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² Also compatible with $J^{PC}=1^-+$.

NODE=M142M3

NODE=M142M3

NODE=M142M3;LINKAGE=KS

 $f_2(1910)$ K^+K^- MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1941±18	AMSLER	06	CBAR 1.64 $\bar{p} p \rightarrow K^+ K^- \pi^0$

NODE=M142M4

NODE=M142M4

NODE=M142210

NODE=M142WX

NODE=M142W2

NODE=M142W2

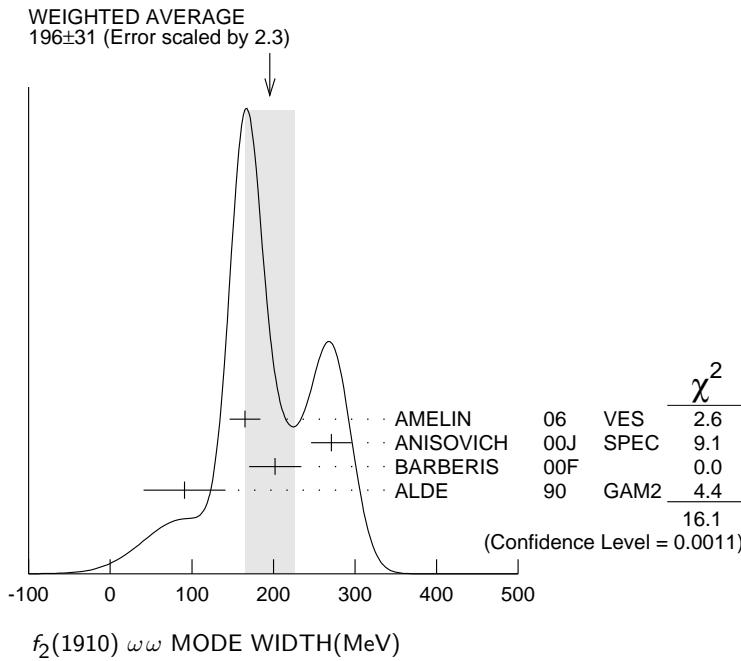
 $f_2(1910)$ $\omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
196±31 OUR AVERAGE	Error includes scale factor of 2.3. See the ideogram below.		

165±19	³ AMELIN	06	VES	36 $\pi^- p \rightarrow \omega\omega n$
271±25	ANISOVICH	00J	SPEC	
202±32	BARBERIS	00F		450 $p p \rightarrow p_f \omega\omega p_s$
91±50	ALDE	90	GAM2	38 $\pi^- p \rightarrow \omega\omega n$

³ Supersedes BELADIDZE 92B.

NODE=M142W2;LINKAGE=AM

 **$f_2(1910) \eta\eta'$ MODE**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
141±41	4 BARBERIS	00A	450 $\bar{p}p \rightarrow p_f \eta\eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
90±35	ALDE	91B GAM2	38 $\pi^- p \rightarrow \eta\eta' n$
Also compatible with $JPC=1-+$.			

NODE=M142W3
NODE=M142W3 **$f_2(1910) K^+ K^-$ MODE**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
120±40	AMSLER	06 CBAR	1.64 $\bar{p}p \rightarrow K^+ K^- \pi^0$

NODE=M142W3;LINKAGE=KS

NODE=M142W4
NODE=M142W4 **$f_2(1910)$ DECAY MODES**

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \pi^0 \pi^0$	
$\Gamma_2 K^+ K^-$	seen
$\Gamma_3 K_S^0 K_S^0$	
$\Gamma_4 \eta\eta$	seen
$\Gamma_5 \omega\omega$	seen
$\Gamma_6 \eta\eta'$	seen
$\Gamma_7 \eta'\eta'$	
$\Gamma_8 \rho\rho$	seen
$\Gamma_9 a_2(1320)\pi$	seen
$\Gamma_{10} f_2(1270)\eta$	seen

NODE=M142215;NODE=M142

DESIG=6
DESIG=11
DESIG=8
DESIG=3;OUR EST; \rightarrow UNCHECKED \leftarrow
DESIG=4;OUR EST; \rightarrow UNCHECKED \leftarrow
DESIG=5;OUR EST; \rightarrow UNCHECKED \leftarrow
DESIG=9
DESIG=10;OUR EST; \rightarrow UNCHECKED \leftarrow
DESIG=12;OUR EST; \rightarrow UNCHECKED \leftarrow
DESIG=13;OUR EST; \rightarrow UNCHECKED \leftarrow

 $f_2(1910)$ BRANCHING RATIOS

$\Gamma(K^+ K^-)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	Γ_2/Γ
seen	AMSLER	06 CBAR	1.64 $\bar{p}p \rightarrow K^+ K^- \pi^0$

NODE=M142R11
NODE=M142R11

$\Gamma(\pi^0 \pi^0)/\Gamma(\eta\eta')$	DOCUMENT ID	TECN	Γ_1/Γ_6
• • • We do not use the following data for averages, fits, limits, etc. • • •			
<0.1	ALDE	89 GAM2	38 $\pi^- p \rightarrow \eta\eta' n$

NODE=M142R4
NODE=M142R4

$\Gamma(K_S^0 K_S^0)/\Gamma(\eta\eta')$

<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_3/Γ_6
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.066	90	BALOSHIN	86	SPEC $40\pi p \rightarrow K_S^0 K_S^0 n$	NODE=M142R7 NODE=M142R7

 $\Gamma(\eta\eta)/\Gamma(\eta\eta')$

<u>VALUE</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_4/Γ_6
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.05	90	ALDE	91B GAM2	$38\pi^- p \rightarrow \eta\eta' n$	NODE=M142R6 NODE=M142R6

 $\Gamma(\omega\omega)/\Gamma(\eta\eta')$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>COMMENT</u>	Γ_5/Γ_6
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2.6 ± 0.6	BARBERIS	00F 450 $p p \rightarrow p_f \omega\omega p_s$	NODE=M142R10 NODE=M142R10

 $\Gamma(\eta'\eta')/\Gamma_{\text{total}}$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_7/Γ
• • • We do not use the following data for averages, fits, limits, etc. • • •				
probably not seen	BARBERIS	00A	$450 p p \rightarrow p_f \eta' \eta' p_s$	NODE=M142R8 NODE=M142R8
possibly seen	BELADIDZE	92D VES	$37\pi^- p \rightarrow \eta' \eta' n$	

 $\Gamma(\rho\rho)/\Gamma(\omega\omega)$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>COMMENT</u>	Γ_8/Γ_5
• • • We do not use the following data for averages, fits, limits, etc. • • •			
2.6 ± 0.4	BARBERIS	00F 450 $p p \rightarrow p_f \omega\omega p_s$	NODE=M142R9 NODE=M142R9

 $\Gamma(f_2(1270)\eta)/\Gamma(a_2(1320)\pi)$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	Γ_{10}/Γ_9
0.09±0.05	5 ANISOVICH	11	SPEC $0.9\text{--}1.94 p\bar{p}$	NODE=M142R12 NODE=M142R12

5 Reanalysis of ADOMEIT 96 and ANISOVICH 00E.

f₂(1910) REFERENCES

ANISOVICH	11	EPJ C71 1511	A.V. Anisovich <i>et al.</i>	(LOQM, RAL, PNPI)
AMELIN	06	PAN 69 690	D.V. Amelin <i>et al.</i>	(VES Collab.)
		Translated from YAF 69 715.		
AMSLER	06	PL B639 165	C. Amsler <i>et al.</i>	(CBAR Collab.)
ANISOVICH	00E	PL B477 19	A.V. Anisovich <i>et al.</i>	
ANISOVICH	00J	PL B491 47	A.V. Anisovich <i>et al.</i>	
BARBERIS	00A	PL B471 429	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BARBERIS	00F	PL B484 198	D. Barberis <i>et al.</i>	(WA 102 Collab.)
ADOMEIT	96	ZPHY C71 227	J. Adomeit <i>et al.</i>	(Crystal Barrel Collab.)
BELADIDZE	92B	ZPHY C54 367	G.M. Beladidze <i>et al.</i>	(VES Collab.)
BELADIDZE	92D	ZPHY C57 13	G.M. Beladidze <i>et al.</i>	(VES Collab.)
ALDE	91B	SJNP 54 455	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+)
		Translated from YAF 54 751.		
Also		PL B276 375	D.M. Alde <i>et al.</i>	(BELG, SERP, KEK, LANL+)
ALDE	90	PL B241 600	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+)
ALDE	89	PL B216 447	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP)
Also		SJNP 48 1035	D.M. Alde <i>et al.</i>	(BELG, SERP, LANL, LAPP)
		Translated from YAF 48 1724.		
BALOSHIN	86	SJNP 43 959	O.N. Baloshin <i>et al.</i>	(ITEP)
		Translated from YAF 43 1487.		